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United States Patent [19]

Ikada et al.

[11] Patent Number: **5,250,584**[45] Date of Patent: **Oct. 5, 1993**[54] **PERIODONTIUM-REGENERATIVE MATERIALS**

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- [21] Appl. No.: **915,770**
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Related U.S. Application Data

- [63] Continuation of Ser. No. 707,940, May 28, 1991, abandoned, which is a continuation of Ser. No. 566,896, Aug. 14, 1990, abandoned, which is a continuation of Ser. No. 391,922, Aug. 10, 1989, abandoned.

Foreign Application Priority Data

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- [51] Int. Cl.⁵ A61F 2/00; C08G 63/08
- [52] U.S. Cl. 523/114; 523/115; 528/354; 528/361; 623/16
- [58] Field of Search 528/354, 361, 182; 435/240.3, 240.31; 433/229; 523/113, 114, 118, 115; 424/425, 426, 492; 623/16

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[57] **ABSTRACT**

A periodontium-regenerating material for the regenerative treatment of the periodontium consists of biodegradable/absorbable copolymers of lactide/ ϵ -caprolactone or lactide/glycolide having a weight-average molecular weight of 40,000 to 500,000 as well as a dynamic modulus of 5×10^7 to 5×10^9 dynes/cm² and an elongation rate of 100 to 2,000 %, both measured at room temperature (25° C.). Those copolymers may be used in the form of a sheet or film which may or may not be porous.

1 Claim, 3 Drawing Sheets

